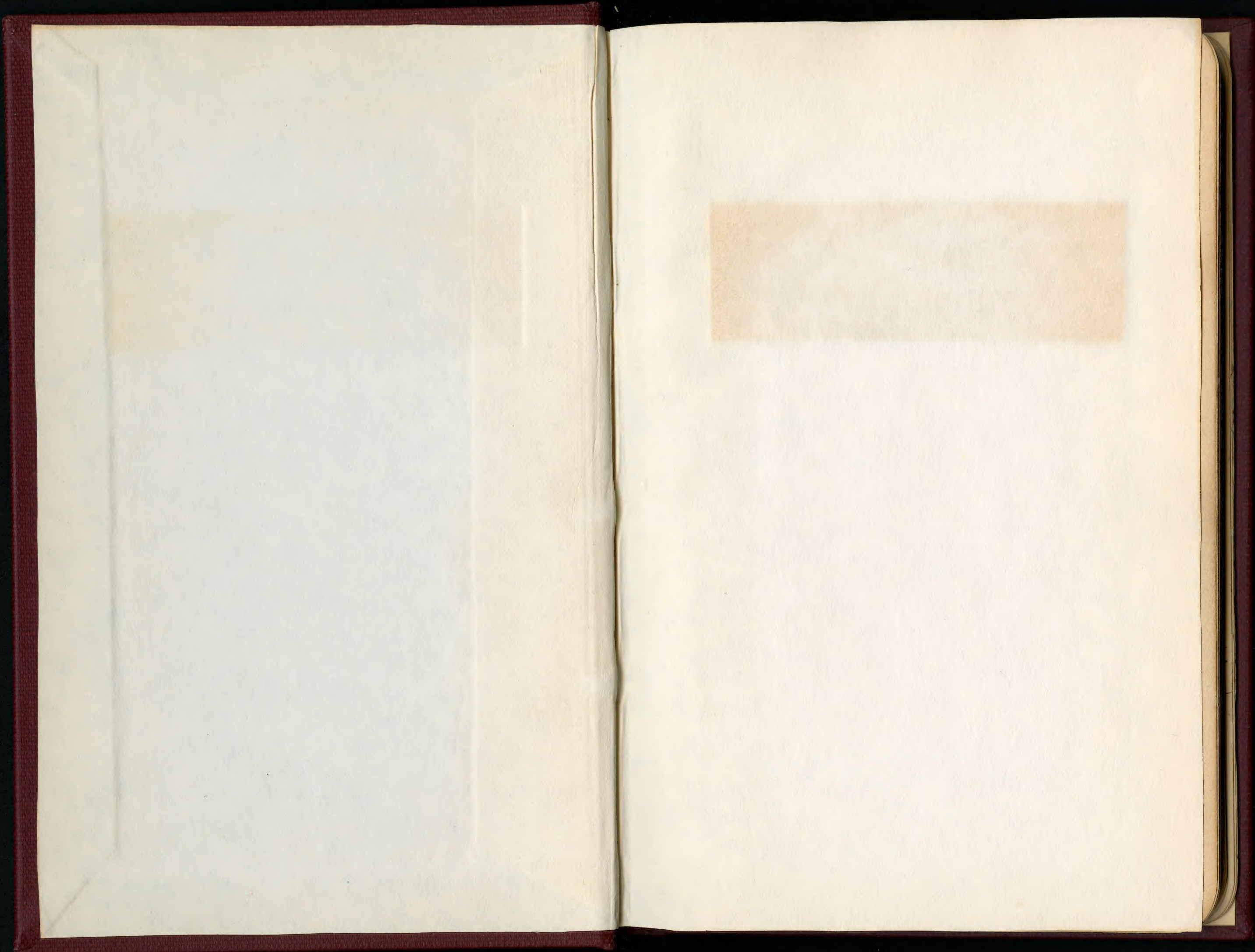


GORMAN 1-317 1902

S. I. LIE



W. W. Gorman
LAKE ILIADNA, ALASKA
JUNE 19 to SEPT. 12, 1902.

R₁ = Rare
 S. or Not ab. = Scarce or Not abundant
 f. ab. = Fairly abundant
 Ab = Abundant
 V. ab. = Very Abundant
 Com. = Common - i.e. Occurring nearly every-
 where in the region -
 (K) = Korean
 (A) = Aleut
 (R) = Russian

LIST OF PLANTS COLLECTED IN
 LAKE ILIAMNA REGION -

- | DATE | No. | NAME | OK. |
|---------|-----|---|-----|
| JUNE 19 | 1 | <i>Rubus stellatus</i> Smith
Rocky slopes
Ab. Open woods & sandy shores | |
| | | (K) = Ung-Ksothl
Fruit is eaten both raw & stewed.
8/2/02. Saw patches of this berry still in bloom
near Kegik to day - | |
| " | 2 | <i>Vaccinium vitis-Idaea</i> L.
Rocky slopes
Ab. Open woods & tundra | OK |
| | | (K) = Hing-ah-goh (thoon-ah)
Fruit is eaten raw, stewed & in the absence of
sugar it is cooked with lard or grease
<i>Vaccinium vitis-idaea</i> L. | |
| " | 3 | <i>Spiraea betulae-folia</i> Pall.
Rocky slopes
V. ab. Open woods, shores & river banks | |
| | | (K) = Ung-guth-lah
<i>Spiraea betulifolia</i> Pall. | |
| " | 4 | <i>Trientalis arctica</i> Fisch.
Mossy glades & open woods
Com. (K) = Thoon-thal-litz-ä | |
| | | <i>Trientalis europaea arctica</i> (Fisch.)
Ledeb. | |

1902.

June 19

- 5 *Chamaenirion latifolium* (L.) Sweet
 v.ab. CK. banks Iliamna Bay OK.

(R) = Tsul-bun-ā

Follows shores, beaches & stream banks

- " 6 *Cardamine*
 CK. banks Iliamna Bay
 Ab. (R) = Knol-nik-ā

Arabis lyrata occidentalis Wats.

- " 7 *Cerastium arvense* var.
 CK. banks Iliamna Bay
 Rare here (R) = Knil-hyock-ā

Arumaria macrocarpa Suck.

- " 8 *Oxyria digyna* (L.) Campd. OK.
 CK. banks Iliamna Bay
 f.ab. (R) = Nong-Kal-chu h-gah

~~The Korais do not eat this (Chief)~~
 The leaves & young stems are eaten both raw & cooked and the dried mature stems are smoked in lieu of tobacco - (E. W. Muff)

1902.

JUNE 19

- 9 *Papaver alpinum* L.
 CK. banks Iliamna Bay
 f.ab. (R) = Lō-Kol-yoo-ee

Papaver nudicaule L.

- " 10 *Silene acaulis*, var.
 CK. banks & rocky crevices slopes Iliamna Bay
 f.ab. (R) = Khuk-thā

Silene acaulis L.

JUNE 20

- 11 *Rorippa palustris* (L.) Bess.
 Stream banks & shores Iliamna Bay
 f.ab. Livid when young
 (R) = Lō-ee-kul-yash-ā
Barbarea americana Rydb.

- " 12 *Chrysanthemum arcticum* L. OK.
 Sea beaches, submerged at high tide
 Also occurs on rocky slopes Iliamna Bay
 Is somewhat heliotropic
 Not ab. (R) = Thoos-sthan-Koo-dhool-yā

1902

JUNE 20

- 13 Argentina Anserina, L. Rydb.
Sea beach, submerged at H.T. Hiamma Bay
Occurs also on stream banks
Com. (K) = Khol-nig-ā
Potentilla anserina L.

- " 14 *Plantago maritima* L. OK
Sea beach, submed. at H.T. Hiamma Bay
Com. (K) = Koth-noo-tlyoh-ā

- " 15 *Triglochin maritima* L. OK
Sea beach submed. at H.T. Hiamma Bay
f. ab. (K) = Klāw-zöö-āh

- " 16 *Romanzoffia Sitchensis* Bong. OK
CK. banks Hiamma Bay
Ab. (K) = Jan-jee-de-Koonah
Romanzoffia sitchensis Bong.

1902
June 20

- 17 *Saxipraga punctata* L.
CK. banks Hiamma Bay
Ab. (K) = Muh-Kindul-Koo-yea
Saxipraga nelsoniana Dou.

- " 18 *Poloniumium coeruleum* L.
CK. banks moist ground Hiamma Bay
Not ab. here
Ab. on route (K) = Thoot-nuh-thoot-yea

- " 19 *Viburnum pauciflorum* P. L. OK.
CK. banks moist ground Hiamma Bay
Ab. 1 to 4 ft. high. (K) = Too-sat-thoon
Fruit is eaten raw & boiled and sometimes put
up in seal oil for winter use.
Pith is removed from the straight branches & they are
then used for pipe stems by the Kenaes

- " 20 *Chrysosplenium alternifolium* L.
Mucky CK. banks Hiamma Bay
Not ab. (K) = Thoo-Kotz-tsok-ah
Chrysosplenium tetrandrum Fries.

1902

JUNE 20 21 Pedicularis
Sandy ck. banks Iliamna Bay
f. ab. (K) = Wats - Kil - toots - a

Pedicularis verticillata L.

" 21 22 Saxifraga bronchialis, L.
Sandy ck. banks Iliamna Bay
Not ab. (K) = Knil - hyoh - eh

OK

" 23 Epilobium
ck. banks Iliamna Bay
not ab. (K) = Koon - shoh - Koon - ah

Epilobium beeringianum Hausskn.

" 24 Angelica
f. ab. ck. banks & open places Iliamna Bay
(K) = Knoh - ah - Kath - pah
Root = Ool - snuk - Kits - na
The root is chewed & then held in the mouth
in lieu of tobacco

Coelopleurum gmelini (Dc.) Ledeb.

OK

June 21 25 Ammodenia peptoides (L.) Rupr.
Sea beach submod. at H.T. Iliamna B.
Is greedily eaten by horses

(K) = Kon - ooz - Kuth - a

Ammodenia peptoides major (Hook.)
Wight.

" 26 Ledum palustre, L. OK
Open woods & marshes S/L. to 1000 ft.
Ab. (K) = Kluk - Ki - y

" 27 Hieracium lanatum, Michx. OK
Open woods Iliamna Bay
In bloom at 1000 ft. not yet out at S/L.
f. ab. (K) = Khais
Is much eaten raw

" 28 Alsine longipes (Goldie) Coville.
Sandy ck. banks Iliamna Bay
Not ab. (K) = Knil - hyoh - eh OK

1902

JUNE

21

29 *Phlegopteris Phlegopteris* (L.) Underw.
Open woods S/L to 1500 ft. Iliamna Bay

(R) = Uh-thoon-ah

Phlegopteris phlegopteris (L.)
Underw.

" 30 *Dryopteris spinulosa* (Hoffm.) Underw.
Open woods S/L to 1000 ft. Iliamna Bay

(R) = Uh-thoon-ah

OK

" 31 *Alnus tenuifolia* Nutt. ?
Slopes & mtn. sides S/L to ft.
Very ab. 2 to 8 in. Diam. Iliamna Bay
Much infested by a moth grub that
destroys the leaves
(R) = Khoon-kee-ah-thoon-ah
Alnus sinuata (Regel) Rydberg.

" 32 *Geranium erianthum* DC. OK
Rocky cliffs open woods Iliamna Bay
Not ab. on Bay - very ab. in Interior
(R) = Chul-chud-eh

OK

1902

JUNE

22

33 *Eriophorum angustifolium* Roth
sphag. marshes. Iliamna Bay
Not ab. here f. ab. on trail inside Pass

(R) = Kun-jee-thah

Near *E. Virginicum* but has longer bristles

" 34 *Picea Canadensis* (L.) B.S.P.
In sphag. marsh Iliamna Bay
Only 4 deperperate spruce 1 1/2 to 2 ft. high and
almost dead were observed here.
At Iliamna Pt. 3 spec. were seen, the tallest
only 26 1/2 in. high

At Innerskin Bay 8 mls. distant a tree
13 1/2 in. in diam. was 165 years old.

This was the prevailing tree along the route
until the mouth of Abitna R. was reached
on 7/23, when *P. Mariana* became the pre-
ailing tree. (R) = Ellh

Cone = Kloo-paesh-ah

Sapling = Schwallah-Koo-yah

Bud = Blo-neya-Kool-yah

Roots = Ko-Kul-lash-ta

Picea canadensis (Mill.) B.S.P.

" 35 *Comarum palustre* L. OK
In ponds in sphag. marsh Iliamna Bay
Ab. but not yet in bloom
Obsd. in fire print on L. Iliamna on 7/17/02
(R) = Klin-ah-Koon-ah

OK

1902
JUNE 2236 *Rumex occidentalis*
Ch. banks Iliamna Bay
Ab. (D) = Kosh-aIt is eaten both raw & boiled
Rumex occidentalis Wats." 37 *Valeriana Sitchensis*, Bong. ?
Ch. banks moist ground Iliamna Bay
Not ab. on Bay very ab. inside
Fragrant (D) = Thsil-thool-thah
Valeriana capitata Pall." 38 *Cattha palustris*, L. ?
In ponds & Ch. banks Iliamna Bay
Not ab. (D) = Thlurr
Is eaten both raw & boiled
Cattha palustris asarifolia (Dc.)
Ruth." 39 *Betula glandulosa*, Michx.
In sphag. marsh Iliamna Bay
Prostrate not thrifty here
(D) = Ahhl-yees" 40 *Betula Alaska*, Sargent
In sphag. marsh Iliamna Bay
Prostrate not thrifty here
(D) = Kutzy-ee-yah

1902

June 22

41 *Salix*
Prostrate in sphag. marsh Iliamna Bay
Ab. (D) = Katch-ah-dhun*Salix fuscescens* Anders." 42 *Salix Sitchensis*, Sargent
Open slopes & Ch. banks Iliamna Bay
Comm. Much infested by a moth grub that destroys
the leaves. Measured 1 spec. at Iliamna R. 9 mi.
in diam.
(D) = Tsub-twhish-a*Salix alaxensis* (Anders.) Coville." 43 *Montia*
Grassy Ch. banks Iliamna Bay
Rare (D) = Kith-ung-Koo-yah
Claytonia sarmentosa C. S. Mey." 44 *Cardamine bellidifolia*, L. OK
Sandy Ch. banks Iliamna Bay
Rare (D) = Bilyh-nah-Koo-thool-yah

1902.
JUNE 22

45 *Diapensia lapponica* L.
Dry rocky slopes Iliamna Bay
f. ab. (K) = Khon-uz-Kuth-ah' OK

" 46 *Lycopodium acuminatum* L.
In sphag. marshes Iliamna Bay
Ab. Thoot-nah-thoot-ya OK

" 47 *Saxastana odorata* (L.) Scribn.
Rocky slopes & hillsides Iliamna Bay
Not ab. *Saxastana alpina* (Sw.) Scribn.

" 48 *Sedum roseum* (L.) Scop.
Rocky cliffs & sphag. marshes Iliamna Bay
Ab. *Sedum frigidum* Rydb.

1902.

JUNE 23

49 *Rubus chamaemorus* L. OK
In sphag. marshes Iliamna Bay
Not ab. here ab. inside

Rubus chamaemorus L.

" 50 *Cornus Suecica* L. OK
In sphag. marshes Iliamna Bay
Occur ab. in open woods inside
(K) = Ung-Kootl
Fruit is eaten raw only
Cornus suecica L.

" 51 *Cerastium*
Sandy OK. banks Iliamna Bay
f. ab. *Cerastium vulgatum* L.
Near *C. vulgatum*

" 52 *Primula*
Rocky slopes 800 ft. el. Jinkel-yash-Pass
f. ab. here
R. = Sweet-Kah
(K) = Ash-shaw-OK-wah
Flowers - Deep red, turning purple on drying.
Res. *P. cuneifolia*

Primula cuneifolia Ledeb.

1902

June 23 53 *Streptopus complanifolius* (L.) DC.
Shady woods Iliamna Trail
f. ab. both outside & inside OK

" 54 *Geum macrophyllum* Willd. OK
Open woods Iliamna Trail
Occurs both outside & inside but not ab.

" 55 *Sambucus racemosa* ^{pubens, Michx.}
Common. Open woods Jinkel-yash Pass
Sambucus racemosa L.

" 56 *Calamagrostis*
Sandy open banks Iliamna Bay
f. ab.

Poa arctica V. Br.
This species wherever observed, was found to
have many of the seeds sprouting while the
plant was yet growing -
On further observation this sprouting appears
to be a fungoid growth of some kind -
m.w.g.

1902

June 24 57 *Anemone narcissiflora* L. OK
Rocky slopes Jinkel-yash Pass
Not ab.

" 58 *Chamaecyparis procumbens* (L.) Kuntze
Rocky slopes Jinkel-yash Pass
Not ab.

Chamaecistus procumbens (L.)
Kuntze.

" 59 *Rubus spectabilis* Pursh OK
Rocky slopes Jinkel-yash Pass
Not ab.

f. ab. on L. Clark ^{near Kge-jik River.}
~~near Tana. It. but not yet ripe.~~

June 25 60 *Pyrola rotundifolia* L. ?
Open woods Iliamna River, Alaska
D = Kheuk-tha

Pyrola rotundifolia L.

1902.

TUE JUNE 25

61 *Rubus chamaemorus*, L. OK
Open woods Hiawatha RiverAb. (R) = Ung-Koot-too-nah
Fruit is eaten both raw & stewed.*Rubus chamaemorus* L." 62 *Menziesia worcesteriana*, Salisb. OK
Open woods Hiawatha River

Not Ab. (R) = Ath-yas

Menziesia ferruginea Smith." 63 *Thalictrum sparsiflorum*, Turcz. OK
field Open woods Hiawatha River" 64 *Geranium erianthum*, D.C. OK
Ab. Open woods Hiawatha River
(R) = Chall-chad-ee

1902.

TUE JUNE 26

65 *Vaccinium*
Open woods & sprag. Marshes - Hiawatha R.Ab. (R) = Tsik-ah-Kah-too-nah
Fruit is eaten raw, stewed & cooked with
Sakumoot*Vaccinium uliginosum* L." 66 *Polygonum viviparum*, L. OK
Open woods & C.R. banks Hiawatha River" 67 *Trisetum subspicatum*, Beauv. OK
C.R. banks Hiawatha River*Trisetum subspicatum* (L.) Beauv." 68 *Populus balsamifera* L. OK
Ab. ~~trichocarpa~~
C.R. and River bottoms Hiawatha R.
6 to 26 IN. diam.

(R) = Snek or Snav, Leaves = Ktoon

Specimens of this tree ^{in early fruit} were collected for *P. trichocarpa*
but a few days after collecting the capsules opened and
were found to be 2-valved, thus excluding it from that
species.

1902.

JUNE 26

69 *Picea Canadensis* (L.) B.S.P.

Slopes & hillsides

Iliamna River

f. ab. 6 to 22 in. diam (sapling)

(R) = Ellh (green tree) or Churdell - lok-wa-too-nah

" Cone = Kloo-pesh-ab

" Buds = Blo-ee-ya-Kool-ya

" Roots = Ko-Kul-lash-a. The roots are split & used for making baskets, lashings of all sorts etc.

Picea canadensis (Mill.) B.S.P." 70 *Betula Alaska*, Sargent

Slopes & hillsides

Iliamna River

Ab. (R) = Kuss-ē-yah or Kuss-ī'-yah or Ket-si-ah

Wood is used for snow shoe frames, sleds, pipe bowls etc.

" 71 *Betula glandulosa*, Michx.

Marshes & water slopes

Iliamna River

When in marshes it is small leaved & prostrate. When on hillsides & water slopes it is large leaved 3 to 12 or 15 ft. high x 1 1/2 to 2.5 in. in diam. but poorly pruned.

(R) = Artl-yes

Betula glandulosa rotundifolia (Spach) Regel.JUNE 27 72 *Fritillaria Kamschatcensis*, Ker.

Not ab. Open woods & river banks

Iliamna River

The bulbs are sometimes eaten raw, but generally gathered & put into a soup or stew with meat fish etc.

(R) = Kan-aj-dlee.

Fritillaria kamschatcensis (L.)

Sawder

1902.

JUNE 27

73 *Rosa acicularis*, Lindl.

OK.

Open woods

Iliamna River

f. ab. (R) = Ung-Kootl-Kuk. Sometimes called

Hush - which = thorns

Seed capsules are eaten raw, boiled in water or cooked in a stew with meat etc.

" 74 *Elymus mollis*, Trin.

v. ab. Sea beach & sandy riv. banks Iliamna River

(R) = Man-thu-thu-sha

Elymus arenarius L." 28 75 *Geranium erianthum*, DC. OK

ab. Open woods

Iliamna River

Like 64 but has pale pink flowers & bluish leaves

(R) = Chah-chah-ee

When the plant has finished flowering the leaves are gathered, dried and used as a tea. The leaves are also boiled into a soup & used as a remedy for various diseases, and a decoction is used as a remedy for inflammation of the eyes.

" " 76 *Rubus pedatus*, Smith

OK

f. ab. Sphagnum marshes

Iliamna R.

2 20.

1902.

JUNE 28

77 *Lupinus*

Open woods

Iliamna R.

f. ab. (R) = Krim-thal-Kuth-a

Lupinus nootkatensis Donn.

" 78 *Oxycoccus Oxycoccifolius* (L.) Macbr. OK
Sphagnum marshes Iliamna R.

f. ab. (R) = Smil-thu-thah

Fruit is eaten both raw & cooked

Oxycoccus oxycoccifolius (L.) Macbr. OK

Streptopus amplexifolius (L.) DC.

" 79 ~~*Vaccinium myrsinites* (Mill.) Greene~~
Open woods Iliamna R.

f. ab. (R) = Klitsch-Kah Chief says
sometimes eaten

JUNE 29

80 ~~*Taraxacum*~~ *lividum* (W. & A. Heller)
Open woods Iliamna R.

Rare *Taraxacum chamissonis* Greene

21.

Mochlingia lateriflora (L.) Fenzl.

1902.

JUNE 29

81 ~~*Cerastium Beringianum* (L.) DC.~~ OK

Ab. Open woods under spruce trees. Iliamna R.

" 82 *Empetrum nigrum* L. OK
Wtn. slopes & phag. marshes. Iliamna R.

Conv. Bushes are burnt as an incense
Fruit is eaten raw but not cooked. Fruit is
said to be beneficial in bronchial troubles.

(R) = Chin-too-nah

" 83 *Viola Rangsdorffii* Fisch.
Open mossy woods & phag. Marshes. I. R.

f. ab. *Viola palustris* L.

" 84 *Lycopodium alpinum* L. OK
Open woods & Wtn. slopes. Iliamna R.

Not ab.

1902.

JUNE 29

85 *Sorbus sambucifolia* (C. & S.) Roem. OK
Open woods Iliamna R.Rare (R) = Muk-thil-chin-ā K's say
that the Russians eat the fruit.Fruit is partially cooked on hot rocks and
then eaten as a remedy in coughs, asthma,
hemorrhages etc.Branchlets are heated on hot rocks and
used to beat the body" 86 *Moneses uniflora* (L.) A. Gray OK
Open mossy woods Iliamna R.
Not ab.JUNE 30 87 *Lippia orechis*
~~*Habenaria*~~
Open mossy woods Iliamna River

Rare (R) = Nan-too'-nah

Not the same as 193. the leaf is longer and
the roots are fleshy -*Lysichiton obtusata* (Pursh) Rydb." 88 *Anemone*
Rare Open woods Iliamna River
Anemone richardsoni Hook.

1902.

JUNE 30

89 *Iris setosa* Pall. OK

Sphag. marshes foot ground

Ab. (R) = Tik-nil-ah-kol-ah-jit-lah Iliamna River

K's sometimes chew the root but say it is not
like pepper." 90 *Salix*

Open woods

Tinkel-yash Trail

Com. (R) = Thoon-thul-kē'-ah

" 91 *Pedicularis*

Sphag. marshes

Tinkel-yash Trail

Not ab. *Pedicularis euphrasoides* Steph." 92 *Andromeda polifolia* L. OK

f. ab. Sphag. marshes

Tinkel-yash Trail

(R) = Kik-i'-ah

Branchlets and leaves are boiled for one
hour and the decoction drunk for coughs
& colds*Andromeda polifolia* L.

24.

1902.
JUNE 30

93 *Mnemonanthus trifoliata*, L. OK
In sphagnum marshes Jinkel-yash Trail
Not ab. (R) = Kull-toots-ah

" 94 *Potentilla fruticosa*, (L.) Rydb.
Moist ground & K. banks Jinkel-yash Trail
Ab. (R) = Kuh-shook-thah
Bark is scraped & applied raw to cuts & wounds
and a decoction of the bark is drunk as a
remedy for headaches & biliousness.
Potentilla fruticosa L.

" 95 *Echinopanax horridum*, (Smith) Dec. & Rydb.
Moist slopes Jinkel-yash Trail
Not ab. (R) = Hush-Karr OK
The branchlets are burnt & the ashes applied
to cuts & wounds.

JULY 2 96 *Aconitum columbianum*, Nutt.
Open woods moist slopes Indian Village
[No-chuk-tol-lit-roo]
(R) = Tan-jee-dee-yil-Kad-dā
Aconitum delphinifolium Db.

25.

1902.
July 3

97 *Arnica*
Mossy slopes Jinkel-yash Lake
Not ab. *Arnica lessingii* (Torr. & Gray.) Greene.

" 98 *Juniperus nana*, Willd. OK
Dry rocky bluff Hianna Bay
Not ab.
Seen also at Hianna Pt., Lake Hianna
Lake Clark
(R) = Chin-tön-ah

" 99 *Poa*
Sea beach Hianna Bay
f. ab. *Poa glumaris* Presl.

JULY 4 100 *Pedicularis*
Open rocky bluffs Hianna Point
f. ab. *Pedicularis lanata* Willd.

1902.
JULY 4

- 101 *Campanula lasiocarpa*, Cham. OK
Open rocky slopes
Not ab. Has from 1 to 5 flowers on a single stem
but is mostly single flowered.

- " 5 102 *Pneumonia maritima* (L.) Hill OK
Shingly beaches
Not ab. Shanna Pt.

- " " 103 *Lathyrus maritimus* (L.) Pige. OK
erect branches
Not ab. Shanna Pt.
Flowers red to purplish red, turning purple
in drying.

- " " 104 *Tofieldia*
Open rocky cliffs & alpine slopes - S/L to 2000 ft.
f. ab. Shanna Pt.
Tofieldia coccinea Richards.

1902.

JULY 5

- 105 *Arctostaphylos alpina*, (L.) Niedenzow OK
Open rocky slopes
Corn. Shanna Point

- " 106 *Salix*
Open rocky & alpine slopes
f. ab. Shanna Point
Salix phlebophylla Anders.

JULY 6

- 107 *Potentilla villosa*, L. OK
Dry rocky cliffs
f. ab. Shanna Pt.
Potentilla villosa Sal.

- " 108 *Artemisia borealis*, Pall.
Open rocky slopes
Shanna Point
Artemisia chamissoniana Bess.

28.
1902.
JULY 6

109 *Phlegopteris Dryopteris* (L.) Fee OK
Open woods among alders. Iliamna Pt.
Ab. *Phlegopteris dryopteris* (L.) Fee

" 110 *Rhododendron*
Open rocky slopes Iliamna Pt.
Not ab. R = Chitl
Flowers - Red, turning purple on drying.
Rhododendron kamtschaticum
Pall.

" 111
Open rocky slopes among *Empetrum* ^(Moss) *Ledum*
Not ab. Iliamna Point

" 7 112 *Salix*
Open rocky talpine slopes Iliamna Point
Salix arctica Pallas.

29.

1902.

JULY 7 113 *Atriplex littoralis* (L.) ? OK
Sea beach Iliamna Point
f. ab. *Atriplex gmelini* L. S. Meyer

JULY 8 114 *Ligusticum Scotchicum* L. OK
Grassy beaches Iliamna Point
f. ab. *Ligusticum scoticum* L.

" 115 *Chamaenerion angustifolium* (L.) Scop. OK
Open rocky slopes Iliamna Point
v. ab. The most ubiquitous and abundant plant
in the whole region traversed. Grows sometimes
5 ft. high, with foliage $\frac{3}{4}$ in wide in rich moist
soil while on the semi-barren tundra it occurs about
1 ft. high, short spiked with foliage $\frac{1}{4}$ in. wide.
The most abundant plants are *Empetrum*
Vaccinium (No. 118.) *Ledum*
R = Naitl-throol-yah. The dry ^{stems} ~~stems~~ are
boiled & the decoction drunk as a tea. The dry hollow
stems are also smoked in lieu of tobacco.

JULY 9 116 *Ribes laxiflorum*, Pursh. OK
Open rocky slopes Iliamna Point
f. ab. R = Chull-tung-ul-thillah.

1902.

- JULY 10 117 *Polygonum*
Open rocky slopes Iliamna Pt.
Not ab.
This species is somewhat alpine & does not appear to be
P. viviparum. *Polygonum viviparum* L.

- " 118 *Vaccinium ovalifolium*, Smith OK
Open rocky slopes Iliamna Point
Not ab. here. Fruit is nearly ripe at this point
already and is large & of fine flavor.
R = Kuri-sah

- " 119 *Aruncus Aruncus*, (L.) Karst. OK
Open woods & grassy slopes Iliamna Pt.
Aruncus aruncus (L.) Karst.

- JULY 12 120 *Hieracium glabra*, Willd. OK
~~*puberula*~~
Rocky cliffs & ch. banks Iliamna Pt.
Com.

1902.

- JULY 13 121 *Galium triflorum* Michx. OK
Mucky ch. banks Iliamna Bay
Rare *Galium trifidum subbiflorum*
Wiegand

- " 122 *Alsinia borealis*, (Bigel.) Britton OK
Mucky ch. banks Iliamna Bay
Not ab.

- " 123 *Montia*
Mucky ch. banks Iliamna Bay
Rare Very fleshy & succulent on collecting
but shriveling greatly in drying -
Claytonia Chamissoi Ledeb.

- " 124 *Galium boreale*, L. OK
Open woods & glades Iliamna River
Com.
The most abundant & characteristic plant of
the Interior. This plant, *Allium*
Dasiphora fruticosa, *Rosa acicularis*, *Hedysarum*
Americanum,
may all be considered characteristic & typical of
the Interior flora.

1902.

JULY 14

125

Fistularia Crista-galli, (L.) Wettst.

Shady woods

Miamma R.

f. ab. Occurs on Miamma R., L. Miamma, Nogahelup R., L. Clark

(Is rather succulent & hard to cure properly)
Rhinanthus crista-galli L.

" 126 ~~Sanguisorba~~ *Sitchensis*, C. A. Meyer.
Shady woods & grassy glades. Miamma R.

Ab. *Sanguisorba latifolia* (Hook.) Coville.

" 127 *Arnica*

Open woods

Miamma R.

Not ab.

Arnica chamissonis Less.

" 128 ~~Chrysopsis~~ *Solidago*

Open woods

Miamma R.

Not ab.

Solidago multiradiata Ait.

1902.

JULY 14

129

Betula

Grassy slopes

Miamma River

Ab.

? Is this *B. glandulosa*

" 130 *Pyrola secunda*, L.

OK

Ab.

Open woods & grassy slopes

Miamma River

" 131 *Veratrum viride*, Ait.

Open woods

Miamma River

Ab.

(K) = Chish-Kin-nah The root is boiled

10 or 15 minutes and the decoction used as an emetic.

The plant is much infested by a grub or small caterpillar & so is hard to see.

Veratrum eschscholtzii (Roem & Sch.) Gray.

" 132 *Pyrola picta*, Spruth?

Open woods & grassy glades. Miamma R.

Not ab.

Pyrola rotundifolia L.

Mag. M.

1902.

JULY 17

1902.
JULY 14 133 *Gyrostachys Romanzoffiana* (Cham.)
Moist woods & hillsides in sphagnum swamps
Not ab. here
Niamna River

Gyrostachys Romanzoffiana (Cham.)
Mac. M.

" 134 *Vaccinium ovalifolium*, Smith
Open woods
Niamna River
Not ab. here. Fruit is excellent & nearly ripe

(R) = Kuni-sah

Fruit is eaten raw & stewed and in the absence
of sugar is boiled with meat grease etc.
MTEE KOWLUH says this fruit is very abundant
at Kodiak and that there it is sometimes com-
dried in addition to being eaten raw & boiled.

JULY 15

135

(1902)

Ab. Hillsides in open woods Niamna River

JULY 16 136 *Calamagrostis*

Open woods, glades, lake & stream banks
Niamna River
V. ab. (R) = Kuli-chini

This is the most valuable grass in the whole region
Calamagrostis canadensis (Mx.) Beauv.

1902.

JULY 17

137

Aster
Sandy beaches & rocky shores. Lake Niamna
Aster sibiricus L.

" 138 *Parnassia Kotzebuei*, C. & S.
Sandy beaches & rocky shores. L. Niamna
Parnassia Kotzebuei Cham. & Schlecht.

" 139 *Salix Sitchensis*, Sanson
Grassy glades & open tundra. L. Niamna
Grows to 5 ft high, sometimes prostrate on tundra.
Is greedily eaten by the pack-horses.
(R) = Kith-on-thil-koo-yah
Salix glauca L.

" 140 *Poa*
Creek & pond banks, usually growing in water
L. Niamna

Colpodium fulvum Griseb.

July 17 141 *Ranunculus reptans*, L. OK
 Along creeks & dried ponds. L. Niamma
 Not ab.

" 142 *Sparganium minimum*, Fries.
~~*Lappula palustris*~~
 In murky ponds L. Niamma
 Not ab.
Sparganium hyperboreum Laest.

" 143 *Hippuris tetraphylla*, L.f.?
~~*vulgaris*~~
 In murky ponds L. Niamma
 Ab.
Hippuris vulgaris L.

" 144 *Roripa*
 Submerged in lake L. Niamma
Roripa palustris (L.) Bess.

July 17 146 *Potentilla*
 Sandy & rocky beaches. Olds. in L. Niamma
 f. ab.
Potentilla monspeliensis L.

" 145 *Epilobium*
 Grassy shores Lake Niamma
 f. ab.
Epilobium palustre L.

" 147 *Cheiranthus cheiranthoides* (L.) Heller
 Sandy & rocky beaches L. Niamma
 Ab.
Crysinum cheiranthoides L.

" 148 *Polunium humile* Willd.? OK
 (Ill scented) Sandy beaches L. Niamma
 Ab.

1902.
JULY 18 149 *Rubus chamaemorus* (fruit) L.
v. ab. Open Tundra Lake Iliamna
(K) =

The Tundra is now dotted pink in patches with the ripe fruit of this berry. The taste is slightly acid & much superior to the same fruit in S.E. Alaska. After flowering the sepals keep the fruit tightly encased so that the berry is fully ripe when they again open out as they did in flowering. If allowed to get too ripe the fruit loses in flavor & turns a light yellow in color.

Rubus chamaemorus L.

" 150 *Saxifraga reflexa*, Hook.
Rocky slopes & bluffs L. Iliamna
Rare here *Saxifraga nivalis* L.

" 151 *Saxifraga*
on rocky slopes & bluffs L. Iliamna
Rare here *Saxifraga rivularis* L.

" 152 *Mimulus laevis* (L.) Sims ?
About Springs West shore L. Iliamna
Ab. *Mimulus guttatus* DC.

JULY 18 153 *Alsinia longifolia* (Muhl.) Britton
f. ab. About Springs ~~West~~ ^{N.} shore of L. Iliamna
Alsinia borealis (Bigel.) Britton

" 154 *Epilobium*
Ab. About Springs ~~West~~ ^{N.} shore L. Iliamna
Epilobium bonganum Hausskn.

" 155 *Cornus suecica*, L. OK
f. ab. Massy shores L. Iliamna
Cold, to show metamorphosis of leaves into
sp. involucre bracts.
(K) = Ung-Kootl. Fruit is eaten raw only
Cornus suecica L.

" *Picea canadensis* (L.) B.S.P.
The tundra about a great part of Lake Iliamna particularly the ^{N.} west shore, which apparently treeless, is found on closer examination to be fairly well dotted with this species in a perfectly prostrate form. The trees or rather saplings do not form groves at present but I think it is only a question of time until cone-forming individuals get a footing and the species becomes well established about the lake. At present it has become fairly well established on the east side and about half way down the west side.

Picea canadensis (Mill.) B.S.P.

40.
1902.
JULY 19

Road House Camp. - I am a month on the expedition this morning and have collected 155 Numbers to date, of which probably 130 are separate species.

In crossing the first 3 miles of the Nogging trail last night, about 2 miles were tundra and 1 mile open woodland. The chief species seen on the tundra were
Hedera latifolia, *Eupatorium rugosum*
Vaccinium vitis-idaea, *Vac* (#65. & 207)
Arctostaphylos alpinus, *Andromeda polifolia*
Salix Sitcheensis, *Salix*
Betula glandulosa,

" 156 *Myrica Gale*, L. OK
Margins of ponds & ketets. Near Nogging R.
Ab. First place this shrub was seen on trip

Myrica gale L.

" 157 *Ranunculus reptans*, L. OK
Margins of Ponds Near Nogging River
Not ab.

" 158 *Tofieldia palustris*, Huds. OK
Tundra & sphagnum Marshes. Nogging Trail
Not ab.

41.

1902.

JULY 19

159 *Gyrostachys Romanzoffiana*, (Cham.) Macbr. OK
Moist tundra & sphagnum Marshes
f. ab. Nogging Trail

Gyrostachys romanzoffiana (Cham.) Macbr.

" 160 *Linnaea Americana*, Forbes OK
Moist woods Nogging Trail
Ab. *Linnaea americana* Forbes

" 161 *Polmonium acutiflorum* ? (White) OK
Grassy slopes Nogging Trail
Rare

JULY 20 162 *Chamaenerion angustifolium*, (L.) Scop. OK
Open tundra Nogging Trail
Ab. Showing stunted appearance of plants on tundra which is here somewhat dry.

(K) = Nil-throl-Kah (or -Klah)
The dry stems are boiled & the decoction drunk as a tea. The dry hollow stems are also smoked in lieu of tobacco.

" 163 *Arnica alpina*, (L.) Olin OK
Open tundra Nogging Trail
Not ab. *Arnica obtusifolia* Lessing.

1902.

JULY 20

164 *Lupinus arcticus*, Wats. Nogaheling Trail
 Open tundra
Lupinus nootkatensis unalaschcensis
 Wats.

JULY 21 165 *Tragacanth* Yel.
 Gravelly slopes Nogaheling R. Rapids
 f. ab. *Tragacanth gracilis* St. Nelson

" 166 *Dryas octopetala*, L. OK
 Gravelly hills Nogaheling R. near Rapids

" 167 *Pedicularis*
 Dried ponds, Nogaheling R. near L. Clark
 not ab. *Pedicularis parviflora* J. E. Smith

JULY 22 168 *Astragalus*
 Sandy beaches Foot of Lake Clark
Astragalus alpinus L.

1902.

JULY 22

169 *Vicia Americana*, Muhl. Foot of L. Clark
 Sandy beaches
 f. ab. *Lathyrus palustris* L.

" 170 *Mertensia* sp. Foot of L. Clark
 f. ab. Sandy shores
Mertensia septentrionalis Wight.

JULY 23 171 *Vaccinium* Low bush
 Open tundra The Narrows Foot of L. Clark
Vaccinium uliginosum L.

" 172 *Boschniakia glabra*, C. A. Meyer OK
 Sandy shores tundra Foot of Lake Clark

" 173 *Parnassia palustris* L. OK
 Shores of ponds partly submerged Ft. of L. Clark

1902.
JULY 23 174 *Comandra Linda*, Richards.
Open woods & dry slopes ^{mouth of} Above Chutitua River
Lake Clark
Ab.

" 175 *Intundra* open woods L. Clark near mouth
of Chutitua River
Common.

" 176 *Woodsia*
dry rocky cliffs L. Clark, near mouth of
Chutitua River
Not ab.
(R) = Chool-yin-thoonah.
Woodsia ilvensis (L.) R. Br.

" 177 *Perminum repens* (L.) Salisb. OK
Grassy woods L. Clark near mouth of
Chutitua River
Rare

JULY 23 178 *Picea Mariana* (Mill.) B.S.P. OK
slopes & hillsides. L. Clark near mouth of
Chutitua River
V. ab.

This tree was first observed on Nogaheling River
a little below the foot of L. Clark. It is just
above mouth of Chutitua R. it is the prevailing
tree. I found one specimen here 16-87 in. in diam.
& 57 ft. high. Almost all the individuals examin-
ed were well covered with cones which as usual
in this species were more or less persistent and
massed near the top.

(R) = Naktl-yoon,

Picea mariana (Mill.) B.S.P.

JULY 24 179 *Bupleurum Americanum* O.R. OK
Rocky cliffs. Near mouth of Chutitua R.
Not ab. L. Clark
(R) = Kol-Kuth-a',

Bupleurum americanum
Coulter & Rose.

" 180 *Draba aurea* Vahl. OK
Rocky cliffs. L. Clark above mouth of
Chutitua River
Yellow. Crucifer

" 181 *Potentilla*?
Rocky cliffs. West side Lake Clark
(R) = No-Kut-thani-Kuth-ini

Potentilla pennsylvanica strigosa
Pursh.

July 24 182 *Dasiphora fruticosa* (L.) Rydb.
 Dry rocky cliffs. West side Lake Clark
 Not ab. Cold, to show dry habitat small leaves.
 R = Tsal-bun-ā'
Potentilla fruticosa L.

" 183 *Drosera rotundifolia* L. OK
 Margins of ponds. West side L. Clark
 f. ab.

" 184 *Drosera longifolia* L. OK
 In slippy ponds. West side Lake Clark
 f. ab.

" 185 *Alnus tenuifolia* Nutt. ?
 Dry rocky slopes West side L. Clark
 Ab. R = Kung-Kuh-yah
Alnus alnobetula (Ehrh.) K. Koch.

July 25 186 *Senecio Balsamitae* Muhl.
 Dry rocky slopes. West side L. Clark
 Not ab. 'Hok-thung-giké'-Kuth-ā
Senecio resedifolius Less.

1902.

JULY 25

187 *Tragallus* Mt. Flavored
 Dry rocky cliffs. W. side Lake Clark
 f. ab. R = Tsal-bun-ā'-Kuth-an
 The leaves are made into a poultice with hot water and applied to painful knees or sore throat also to cuts & wounds.

Tragallus gracilis St. Nelson.

" 188 *Hedysarum Americanum* (Mx.) Britton
 Sandy stream Banks. W. side L. Clark
 f. ab. R = Kee-lah Roots are eaten raw, boiled, sometimes cooked with meat etc.
 This is one of the staple vegetable foods of the natives (both Kruai & Aunts) in this region.
 The dried roots are ground and (boiled) to make a tea.

Hedysarum americanum (Michx.) Britt.

" 189 *Artemisia vulgaris* v. *Tilesii* Ledeb. OK
 Stream banks & moist ground. Kee-jik Village
 f. ab. R = No-Kut-than
 K's say the bear is fond of the roots of this plant & digs it up to get them.
Artemisia Tilesii Ledeb.

July 26 190 *Conioselinum Gmelini* (C. & R.) C. & R. ?
 Sandy Ch. & Lake banks. W. side L. Clark
 (10 miles from head)
Conioselinum gmelini (Cham. & Schlecht.) Coult. & Rose.

1902

July 26

191 *Ribes rubrum*, L.

OK

Rocky slopes & open woods. Ildo in L. Clark
 f. ab. but not at all well fruited. 12 miles p. head

(R) = Chul-d-ung-ul-thillah

[Tyoonok] = Noon-uz-thuth-a' Thoonah

Fruit is eaten raw, stewed, cooked with other
 fruit. Sometimes with meat &c.

" 192 *Rubus strigosus* Michx. OK
 Not ab. Rocky slopes Ildo in L. Clark

(R) = Noo-yah-Kut-lah

Fruit is eaten raw, stewed & boiled with meat
 fish etc.

" 193 *Lipnorchis*
~~*Artemisia*~~

In masses of *Empetrum*. Hd. of L. Clark

Rare (R) = Wo2-gilt-toots-ah

Not the same as No. 87. - The leaf is smaller
 and the roots firmer & ligneous - ~~newly~~

(477) *Lysichiton obtusata* (Pursh.) Rydb.

" 194 *Perovskia repens* (L.) Salisb. OK

In masses of *Empetrum*. Hd. of L. Clark

Rare

July 26 195 *Pyrola minor*, L.

f. ab. In beds of *Empetrum* Hd. of L. Clark
 (R) = Nun-chirrah

Pyrola secunda L.

1902

July 26

196 *Salix*

Sandy lake banks. W. side Hd. of L. Clark
 Not ab. Tree 8 to 15 ft. high

(R) = Uh-sna-j-Kuth-an

(Rus) = Al-for-nak

Salix nuttallii Sargent.

July 27

197 *Allium sibiricum*, L.

OK

Sandy stream bks. W. side Hd. of L. Clark

Not ab. (R) = Huh-thunl-prik-ah
 Both stems & bulbs are eaten raw & cooked. They are
 also cultivated by the K's. The bulbs are sometimes
 gathered for winter use.

Allium sibiricum L.

" 198 *Artemisia veranvortia* Wats.

Wet rocky cliffs. Hd. of L. Clark

Not ab. (R) = Nun-thin-iz

Artemisia arctica Stev.

" 199 *Salix*

Klika-killa

Sand bars & sandy bks. ~~Silly~~ river W. side
 Hd. of Lake Clark

(R) Trees = Sul-chish-ah,
 Leaves = Kith-oon-thil-ki-a,
 Armbuts = Kol-lul-uk-ah,

Salix alaxensis (Tudor.) Coville

" 200 *Festuca rubra* v. Klika-killa

Sand bars & sandy bks. ~~Silly~~ river W. side
 Hd. of L. Clark

(R) = Kuh-chun

This grass is used for insides in umklucks, to hatch
 caches, igloos etc.

Festuca rubra L.

1902.

JULY 28

201 *Campanula lasiocarpa* Cham. OK
 Very rocky slopes 1500 ft. above sea level
 Hd. of L. Clark

f.ab. The only spot in which this plant was
 found even fairly abundant.

" 202 *Parassia palustris* L. OK
 Mossy borders of lagoons. Hd. of L. Clark
f.ab. (R) = Kuh-chun-chill-lah

" 203 *Eriopetrum nigrum* L. OK
v.ab. & well fruited { Open rocky slopes 1500 ft. above S/L.
 Not in sphagnum
 W. side Hd. of L. Clark

(R) = Kuk-Kozh'-nah Thoon-ah
 Fruit is eaten raw, stewed & boiled with meat etc.
 Branchlets & leaves are chewed in lieu of Tobacco.
 The raw fruit is said to be beneficial in hoarseness
 & bronchial troubles.
 The bushes & branchlets are burnt as an incense on
 festive occasions.

" 204 *Pedicularis*
 Open rocky slopes 1500 ft. above sea level
 Hd. of Lake Clark
Not ab. Now passing into fruit
 (R) = Kin-dhaj-Kath-ā

Pedicularis euphrasioides Steph.

1902.

JULY 28

205 *Aconitum delphinifolium* DC. OK
 Grassy slopes 1500 ft. above sea level
 W. side Hd. of Lake Clark

Ab. (R) = Jan-jee-dee-yil-Kuth-ā
 The leaves are dried in Autumn & used in lieu
 of tea.

" 206 *Phleum alpinum* L. OK
 Open mossy slopes 1500 ft. above S/L.
 W. side Hd. of L. Clark
Not ab. (R) = Kuh-chung-Kuth-in
 Heads = Blö-yuk-thā

" 207 *Vaccinium* low bush
 Open rocky slopes 1000 to 1500 ft. above S/L.
 W. side Hd. of L. Clark
v.ab. (R) = Tsik-ah-Kah-Thoon-ah
 Fruit is eaten raw, stewed & sometimes boiled
 with salmon por (Sockeye) meat etc.

Vaccinium uliginosum L.

" 208 *Actaea arguta* Nutt.
 Moist woods 100 to 600 ft. above S/L.
 W. side Hd. of Lake Clark
f.ab. (R) = Chah-toon-grek-ah
 The fruit & stems are well boiled in water and
 doses of the decoction drunk as a remedy for
 chills

Actaea rubra (Rit.) Wied.

1902

JULY 28

209

Festuca rubra v.

f. ab. Sandy shores

W. side Hd. of L. Clark

Festuca rubra L.

"

210 *Festuca*

Sandy shores

W. side Hd. of L. Clark

f. ab.

(K) = Tsil-thrall-ghun-ā

Bromus pacificus Shear.

"

211 *Boschniakia glabra*, C. A. Meyer OK

Open woods & open rocky slopes - S/L to 2000

ft. - Parasitic on roots of *Alnus*

, Vac.

Arctostaphylos alpinus & *Picea Canadensis*.

(K) = Schwöblā

W. side Hd. of L. Clark

JULY 29

212

Hippuris vulgaris L. OK

f. ab.

In ponds & lagoons. W. side Hd. of L. Clark

Showing appearance of plant when grown in deep
mucky ponds.

"

213 *Picea Canadensis* (L.) B. S. P.

Open flats & slopes. W. side Hd. of L. Clark

Measured 2 trees, the largest I could find, on
grassy slopes W. side Hd. of L. Clark. One proved to
be 18 and the other 25 in. in diam. Specs. taken
from a tree 126 years old, 56 ft. high by 12½ in.
Picea canadensis (Mill.) B. S. P.

(No. 213)

Tree

= Ellh

Roots = Ko-Kul-lash-ā 53.

Cone

= Kloo-poosh-ah

Seedling

= Schwöblā - Koo-yah

Bark

= Blā-oo-yā - Kool-yah

diameter. This is the prevailing conifer
all about L. Clark except a small tract
near the mouth of Chulitna R. where
P. Mariana is the prevailing tree.

7/31. Measured & photod. a small tree of *P.*
Canadensis on E. side, Hd. of L. Clark
70 yrs. old, 30th in. high by 30th in. in diameter.

Soil a sandy creek delta.

The fresh branchlets are boiled for our food or more and
small doses of the decoction drunk as a remedy for coughs
colds etc. The fine roots are gathered & being split are
used to make baskets, lashings, etc.

JULY 29

214 *Utricularia*

f. ab.

In muddy ponds & lagoons. W. side Hd. of L. Clark

Utricularia vulgaris L.

"

215 *Mockingia lateriflora* (L.) Fenzl. OK

Not ab.

(5) Several plants collected during a
walk up Canyon water course, E. side
Hd. of L. Clark

"

216 *Senecio subnudus*, DC. ?

Wet rocky cliffs. Canyon E. side Hd. of L. C.
Rare *Senecio resedifolius* Less.

1902.

JULY 29

217

Primula

Dry rocky cliffs, Canyon E. Side

Hd. of Lake Clark

Rare*Androsace chamaejasme* Hook." 218 *Saxifraga*

Dry rocky cliffs, Canyon E. Side

Hd. of L. Clark

Rare

Is probably same as No. 151.

Saxifraga rivularis L." 219 *Viola biflora* L. ?

Dry rocky cliffs, Canyon E. Side

Hd. of Lake Clark

Rare*Viola glabella* Nutt.

JULY 30

220

Calamagrostis

Slopes & hill sides in open woods E. Side

Hd. of Lake Clark

Ab.*Calamagrostis canadensis* (Mx.) Beauv." 221 *Poa*

Sandy slopes of rock slide E. Side

Hd. of Lake Clark

f. Ab.*Poa pratensis* L.

1902.

JULY 30

222

Calamagrostis

Open woods & hill sides, E. Side

Hd. of Lake Clark

Ab.*Calamagrostis laugsdorfii* Trin." 223 *Rubus strigosus*, Michx.

Open woods E. Side

Hd. of Lake Clark

Ab. here" 224 *Lycopodium annotinum*, L.

Sphagnum woods, E. Side, Hd. of L. Clark

Ab.This is the chief *lycopodium* here

" 225

Elymus

Sandy lake shores. Hd. of Lake Clark

Agropyrum repens (L.) Beauv.

" 226

Elymus

Sandy lake shores. E. side, Hd. of L. Clark

Agropyron violaceum (Rorn.) Var.

1902.

JULY 31

227 *Funaria*

Moss

On old sand spits & about old campfires
Hd. of Lake Clark

Ab.

I am now out 1 week & 12 days and have coll'd.
227 numbers which probably includes 180 species
= an average of $5\frac{1}{4}$ numbers per day

Aug 21

228 *Allium sibiricum*, L.

OK

Rocky beaches. Ilds. nr. mouth of Chukotna R.
Not ab. Lake Clark

(R) = Huh-thunl-hrik-ah
or Hoh-thung-hrik-ah

Allium sibiricum L.

" 229 *Conioselinum Gmelini* (C. & S.) C. F. R. ?
Rocky beaches. Ilds. nr. mouth of Chukotna R.

f. ab. (R) = Kill-ah-thoonah

The dried roots & pounded and boiled & the decoction
drank in lieu of tea. The root is also eaten in
Autumn as a food plant.

Conioselinum Gmelini (Cham. & Schecht.)
Fistularia Crista-galli (L.) Wettst.

" 230

Rocky shores. Ilds. nr. mouth of Chukotna R.
f. ab. L. Clark

Rhinanthus crista-galli L.

1902.

Aug 2.

231 *Artemisia*

Sandy shores. Ilds. nr. mouth of Chukotna R.
Rare here L. Clark

Close to *A. ciliata**Artemisia physodes* Fisch.

" 232 *Aster foliaceus*, Lindl.
Sandy shores. Ilds. nr. mouth of Chukotna R.
f. ab. (R) = Hoh-thung-ik-Kuth-a L. Clark

Aster sibiricus L.

" 233 ? *Potamogeton perfoliatus* Richardsonii ^{OK}
In 10 to 15 ft. of water. Mouth of Chukotna R.
v. ab. Water fairly clear but marshy to taste
(R) = Tah-tloot-ah
The Indians say the mouse is very fond of this plant
& that he will wade into the water & immerse his head
to get it. *P. perfoliatus richardsonii* Bennett.

Aug 3

234 *Populus tremuloides* Michx.

OK

Slopes & hillsides. Mouth of Chukotna R.
Not ab. (about 1/2 mile from L. Clark)

Specs. from 2 saplings about 2 ft. high
This tree is not ab. anywhere yet observed on
the trip the first observed was along the Hocking
trail between L. Giamma & L. Clark and it occurred
sparingly from that point to the head of L. Clark but
evidently not in its proper habitat as no large trees
were observed and no animals were seen at all.

(R) = Taht-al-zoo-yah.

The Komaia appear to have a superstitious dislike to
this tree and, if possible avoid using it even for fuel.

Potamogeton perfoliatus richardsonii
Bennett.

Aug 3 235 *Chamaedaphne*
Marshy banks. Chulitna River
v. ab. (near mouth)
(K) = Naktl-nana-thagha-thoon-ah
The dried leaves are boiled and the decoction
drank in lieu of tea.

Chamaedaphne calyculata (L.) Moench

" 236 *Myrica* Gale, L.
Ab. Marshy banks. Chulitna River (near mouth) ok
(K) = Klin-ah-loo
The stems & leaves are boiled and the decoction
drank as a remedy for coughs & hoarseness.

Myrica gale L.

Aug 4 237 *Epilobium cicutum*, Pursh. ok
f. ab. About cold springs. Nogaheling River
(K) = Nil-throl-Kā
The leaves & stems are dried & used in lieu of tea -
" " " " " & also used " " of tobacco -

" 238 *Dryopteris*
About cold springs. Nogaheling River
Not ab. here (K) = Uh-toon-ah
The roots of this fern are boiled or cooked on hot stones
& eaten. The roots are also boiled & sugar added to the
decoction which is then allowed to stand until fermentation
takes place when it is drunk in lieu of opikay or hootch.

" 239 *Thymium cyclosorum* Rupr. ok
~~*Thymium*~~ *Swertia peruviana* L.
Moist ck. banks. Nogaheling River
(K) = Kazh-ā-Koo'-ah
The stems & leaves are boiled & eaten as a greens
like spinach

1909.
Aug 4 240 *Sphagnum*
Tundra & open woods. W. side L. Clark
v. ab. but not fitted in any locality so far visited
on this trip. (dried and)

Is used by the natives as a padding or
cushion for the basket of birch bark & willows
in which infants are carried.
At childbirth a bed of this moss thoroughly
saturated with moisture is made in front of
the fire and the patient placed upon it
until a copious perspiration is produced.
So far as could be learned this practice appears
to be followed ~~rather~~ as a long established tribal
custom rather than for any beneficial effect
which it is expected to produce.

(K) = Uh-rō-veet

(K) sometimes = Nong-Koo-yah

Aug 7 241 *Dryopteris spinulosa*
~~*Aspidium speciosum*~~
Moist woods. Nogaheling Trail
f. ab.

Dryopteris spinulosa dilatata
(Hoffm.) Underw.

" 242 *Equisetum palustre* L.
Moist open woods. Nogaheling Trail -
Ab. The glossy brown, lower section of the stem
of this plant is used to ornament the baskets
[Hockie] made by the Aleuts & Kanaaks, by lining them
in with the fine spruce roots of which the
baskets are made, thus producing a variegated
pattern.
(K) = Chi-chi-yul-Kuth-ā
" Brown stuff = Thall-thazh-ah

242a. *Equisetum sylvaticum* L.

60.

(1902)

(Aug 3) 243 *Betula*

v. ab. here Moist slopes & banks, Chutitua River
Spec. from small trees 12 to 15 ft. high.
The Indians insist that this is not
the same as Nos. 40 & 70. & call it
Kunk-Ruk-yah, while they call 40 & 70.
Kutz-e-yah

Aug 9 244 *Picea*

f. ab. Drained flats. Noghehling Trail
Tree is 168 yrs. old, 45^{ft} - 4 in. high x
10 in. diam. B. H.
Has skin long cones like *P. Can.* but
has no odor and has short foliage.
Like *P. Mariana* -

Picea canadensis (Mill.) B. S. P.

Aug 13 245 *Pedicularis parviflora*, J. E. Smith OK
Not ab. Margins of ponds. Noghehling Trail
Mostly submerged now owing to heavy rains
of the past 10 days.

" 246 *Aschmupsia calycina*, Presl.

Not ab. Pond Margins & open tundra.
Noghehling Trail

Agrostis rubra L." 247 *Cornus suecica*, L. OK (Fruit)

f. ab. Open woods & bridges in tundra.
Cornus suecica L. Noghehling Trail

Aggallus nigroscus, (Pall.) Heller 61.*Aschmupsia* OKAug 13 248 *Aschmupsia calycina*, Presl. See 246

Not ab. Dry slopes & bridges in tundra
This plant was often observed but never
found in flower or fruit.
Noghehling Trail

" 249 *Vaccinium Vitis-Idaea*, L. OK

Open woods & dry ridges in tundra.
Noghehling Trail
Corr.

Vaccinium vitis-idaea L." 250 *Euphrasia latifolia*, Pursh. ?

Rare here Dry ridges in tundra
Noghehling Trail

Euphrasia mollis (Ledeb.) Mett.Aug 14 251 *Viburnum parviflorum*, Pylae OK

v. ab. Open woods Noghehling Trail

This shrub is from 3 to 10 ft. high here &
is so abundantly fruited that the branches
are bent almost to the ground.

" 16 252 *Pedicularis parviflora*, J. E. Smith OK

f. ab. Margins of Ponds. Lake Niannan
Mostly submerged at present owing to the late
heavy rains.

" " 253 *Saxifraga hirculus*, L. OK

OK. Banks of pond margins. Niannan
Not ab.

Saxifraga hirculus L.

Aug 16 254

Wet CK. banks.
Not ab.

L. Iliamna

Aug 20 255 *Sorbus (malucifolia)* (C. & S.) Roem. ^{OK}
 Hillsides & open woods Lake Iliamna
 (Wm.) R = Buk-thish-na

Fruit is eaten & bark is chewed as a
 remedy in coughs, colds, asthma &c.
 The Natives employ the branches of this tree
 exclusively, for the brooms used about their
 houses, caches, & igloos.

" 256 *Nabalus hastatus* (Less.) Heller. ^{OK}
 Open tundra Jinkel-Yash Trail
 Not ab.

" 257 *Gentiana*
 f. ab. Open tundra Jinkel-Yash Trail
Gentiana platypetala Cris.

" 258 *Silbaldia procumbens*, L. ^{OK}
 Dry rocky cliff Jinkel-Yash Trail
 Not ab.

Aug 21 259

Sea weeds picked up in a trap across
 Iliamna Bay tide flats at low tide.
 Submerged under 20 feet of water at
 high tide.

Aug 22 260 *Juniperus nana*, Willd. ^{OK}
 Not ab. Dry rocky cliffs Iliamna Point
 R = Chin-too-na
 Now in good fruit

" 261 *Rhododendron*
 Not ab. Dry rocky cliffs Iliamna Point
 R = Chitt
Rhododendron kamschaticum Pau.

" 262 *Cryptogramma acrostichoides*, R. Br. ^{OK}
 Not ab. Creeks & on dry rocky cliffs
 Iliamna Point

" 263 *Achillea borealis*, Bong. ^{OK}
 Open woods & CK. banks
 Iliamna Point
 Com. R = Hoonl-Koh'-ah-dhool'-ya

1902.

Aug 23 264 Bryopteris

f. ab. Open woods among alders

(K) = Uh-toon-ah = No. 238. Iliamna Point

The roots of this fern are boiled or cooked on hot stones and then eaten both in Spring & Autumn.

The roots are also boiled & sugar added to the decoction which is then allowed to stand until fermentation takes place, when it is drunk in lieu of whiskey or hoochinoo. The roots are also sometimes fermented with sugar & flour & water or molasses flour & water in making hoochinoo.

Stachyrium cyclosorum Rupr." 24 265 *Sorregia Pseudo-arnica*, Less. OK

Not ab. Springle beaches Iliamna Bay

This fleshy composite was not yet in bloom on July 13. But on Aug. 24 (6 weeks later) it had already matured its fruit which is now disappearing.

Senecio pseudo-arnica, Less.*Matricaria arnica*, (Less.) Porter" 266 *Matricaria physocarpa*, DC.

f. ab. Open places about all old Indian Villages & old camps. Iliamna Bay

(K) = Al-lee-mush'-ka

This is the most abundant introduced weed in the whole region. *Matricaria discoidea* DC.

1902.

Aug 24 267 Brassica

Not ab. Open places about old Camps

Iliamna Bay
Brassica campestris L." 268 *Trifolium*

Open places about old camps
Not ab. *Trifolium repens* L. Iliamna Bay

" 269 *Chenopodium* ~~leptophyllum~~ ^{leptophyllum, Nutt.}

Open places about old camps
Not ab. Iliamna Bay

Chenopodium album viride (L.) Moq." 25 270 *Echinopanax horridum*, (Smith) (fruit) OK Dec 1891.

f. ab. Open woods & gulches Iliamna Point

" 271 *Loglitiche*

Sea beach submerged at high tide
Not ab. *Aster humifusus* (Rottb.) Britton Iliamna Point

" 272 *Gryzanthemum arcticum*, L. OK

Sea beach, sometimes submerged at high tide
also on dry rocky cliffs. Iliamna Point
Not ab.

1902.

Aug 26 273 *Sambucus pubens* Michx. (flower) ~~racemosa~~
 Not ab. Open woods Cottonwood Bay

This shrub for some reason, possibly the proximity of a quow-bank during the early part of the season, is now in full bloom in this Bay.

Sambucus racemosa L.

" 274 *Iris setosa* Pall. OK (fruit)
 f. ab. grassy glades & R. banks
 Cottonwood Bay

" 275 *Senecio Psyclo-frica*, Less. OK
 Not ab. Shingly sea beaches
 Cottonwood Bay
Senecio pseudo-arnica Less.

" 276 *Echinopanax horridum* (Smith) OK Dec. 7 Pl.
 f. ab. Open woods moist gulches
 Cottonwood Bay

Colld. to show crinkled condition of leaves when grown in the open.

(R) = Hush-kurr

1902

Aug 26 277 *Pneumaria myritima*, L. OK
 Shingly sea beaches
 Not ab. Cottonwood Bay

" 278 *Woodsia*
 Dry rocky clefts Iliamna Point
 Not ab.

Woodsia ilvensis (L.) R. Br.

" 279 *Armaria* (fruit)
 Dry rocky cliffs Iliamna Point
 Not ab.

Armaria arctica Stev.

" 31 280 *Woodsia*
 Dry rocky clefts S. of Iliamna Point
 Not ab.
Filix fragilis (L.) Underw.

Sept. 1 281 *Artemisia vulgaris* ~~Tilesii~~ Tilesii, Ledeb. OK
 Sandy rocky slopes above high tide
 S. of Iliamna Point

(R) = No-Kull-than - or Tsul-bung-ja
 Rs. say the bark is very good of the roots
 A poultice of the leaves heated on hot stones
 is applied to ~~hot stones~~ ~~is applied to~~ swellings
 etc.

Artemisia Tilesii Ledeb.

1902.

Sept 1 282 *Oxyria digyna* (L.) Campfd.
f. ab. Rocky slopes S. of Iliamna Point
(R) = Kosh'-a

The leaves are eaten both raw & boiled &
the dried stems are smoked in lieu of tob.

Isoetes macrospora, Brid.
" 4 283 *Isoetes macrospora*, L.
Moist ck. banks & moist woods
Not ab. Iliamna Point

" " 284 *Racomitrium*
Rock slides & talus slopes
Ab. Not observed in fruit Iliamna Point

This moss is usually the first vegetation to
obtain a footing on rock slides & talus slopes &
is followed in due course by *Empetrum*,
Ledum etc.

" 6 285
Moist ck. banks & moist rocks
f. ab. Iliamna Point

1902.

Sept. 7 286
Not ab. Dry rocky cliffs Near Iliamna Point
Silvery lichen

" 287 *Solidago*
Creek banks & margins of rock slides
f. ab. Near Iliamna Point

Solidago multiradiata Ait.

" 12 288 *Epigaeon*
~~*Asclepias*~~ *peregrinus* (Pursh.) Greene
Open grassy glades about 1000 ft. el.
Not ab. Mtn. ridge E. of Iliamna Point

" 289 *Gnaphalium*
Open grassy glades, 1000 ft. el.
Not ab. Mtn. ridge E. of Iliamna Pt.
Sieversia rossii R. & S.

" 14 290 *Picea sitchensis* (Bong.) T. & M.
Hillsides & slopes from sea level up to about 800 ft.
Ab. E. Iliamna (Gladhaugh Bay)

From what I observed in this bay I judge *P. sitchensis*
to constitute say 50 to 60% of the conifers here, *Tsuga*
heterophylla, about 25-30% and *T. & M. mertensiana*
say 15 to 20% but *T. & M. mertensiana* is the prevailing
tree on the sphagnum marshes.
Picea sitchensis (Bong.) Traut. & Mey.

1902.

Sept 14 291 *Tsuga heterophylla* (Raf.) Sargent
Hillsides & slopes
Ab. Ellumar (Gladhaugh Bay)

One tree of this species observed here, measured
3^{ft.} - 2ⁱⁿ (say 7 1/2 dm.) Breast High.

" 292 *Tsuga Mertensiana* (Bong.) Carr. OK
Ab. Hillsides & slopes from s.l. to about 800 ft.
Ellumar (Gladhaugh Bay)

This was the only conifer found growing in the
sphagnum marshes. One tree of this species (not
living but quite sound) observed here, measured 3^{ft.} - 4ⁱⁿ
= 11 M. - 2 cm. in diameter breast high.

Tsuga mertensiana (Bong.) Carr.

" 293 *Malus rivularis* (Dougl.) Roem.
Sea beach, open woods & edge of tundra.
f. ab. Ellumar (Gladhaugh Bay)

This point appears to be about the northern limit
of this tree as it was not found anywhere
N. of Cook Inlet, though fully fruited &
well established here.

Malus rivularis (Dougl.) Greene

" 294 *Impatiens biflora* Watt. OK
Sea beach margin of sphagnum marshes
Not ab. Ellumar, Alaska
Now in ripe fruit -

1902.

Sept. 14 295 *Microseris* yel. Camp.
In sphagnum marshes
Not ab. Ellumar (Gladhaugh Bay)

Scorzonella borealis (Tour. & Gray)
Greene.

July 3 296 *Diapensia*
Rare Dry rocky banks. Jinkel-yash CK.
Differs from *D. lapponica* in having the lobes
longer & the tube shorter -

Diapensia lapponica L.

June 23 297 *Arnica alpina* (L.) Plin ?
Rare In sphagnum marshes
Ellumar Bay

July 3 298 *Cassiope*
Rare Dry rocky banks. Jinkel-yash Creek
Cassiope lycopodioides (Pall.)
Don.

July 28 299 *Gentiana*
Rare Dry rocky slopes about 1500 ft. above S/L.
N.W. side Hd. of Lake Clark
Plant is so badly frost-bitten at this date as to
almost past collecting -

Gentiana glauca Pall.

72.

1902.

- July 13 300 *Arcteranthis Cooleyae* (Rose) Greene
 Moist slopes. Iliamna Pass
Rare *Ranunculus eschschottzii* Schlecht.

- " 3 301 *Cardamine bellidifolia*, L. ^{OK}
Not ab. Sandy Creek banks. Jinkel-yash Trail

- " 29 302 *Cardamine*
 Rocky cliffs - S.E. side
Rare here Hd. of Lake Clark
 Is probably same as No. 6.
Travis lyrata occidentalis Wats.

- " " 303 *Silene acaulis* var.
 Rocky cliffs - S.E. side
Rare Hd. of Lake Clark

Silene acaulis L.

- " " 304 *Cerastium Behringianum*, C. & S.
Not ab. Rocky cliffs - S.E. side
 Hd. of Lake Clark

Cerastium vulgatum L.

- " 3 305 *Silene acaulis*, L. ^{OK}
f. ab. Sandy Cr. banks. Jinkel-yash Trail

1902.

- July 13 306 *Montia*
Rare Mucky Cr. banks. Iliamna Bay
Montia fontana L.

- " 29 307 *Lathyrus maritimus*, (L.) Bigel. ^{OK}
f. ab. Sandy beaches. Hd. of Lake Clark
 (R) = Chöl'-yim-bok-ah

- " 6 308 *Potentilla*
f. ab. Dry rocky cliffs. Iliamna Point
Potentilla villosa Pau.

- " 29 309 *Hemiera ranunculifolia*, (Hook.) Raf.
Rare Rocky cliffs S.E. side
 Near Hd. of Lake Clark

Saxifraga cernua L.

- " " 310 *Saxifraga caespitosa*, L.
Not ab. Rocky cliffs S.E. side
 Near Hd. of Lake Clark

Saxifraga spheniflora Steud.

- " 6 311 *Saxifraga bronchialis*, L. ^{OK}
Npt ab. here Dry rocky cliffs. Iliamna Point

73.

1902.

Aug 17 312 *Saxifraga reflexa*, Hook. ?
Not ab. Rocky cliffs - Nogaheling Rapids
Saxifraga nivalis L.

Aug. 4 313 *Epilobium*
f. ab. About cold springs. Nogaheling River
Epilobium bongardi Hausskn.

July 23 314 *Betula*
Not ab. Spedy shores open tundra
 Foot of Lake Clark
 Colld. from a small tree about 15 ft. high.

July 10 315 *Agrostis*
Not ab. Open rocky slopes. Iliamna Point
Agrostis rubra L.

Aug. 13 316 *Juncus stygius*, L. ?
Not ab. Margins of ponds. Nogaheling Trail
 A very slender form if of this species -
Juncus biglumis L.

1902.

Sept 12 317 *Lutkea pectinata*, (Hook.) Kuntze.
Not ab. Open grassy slopes - 800 to 1500 ft. above Sea level
 Mtn. ridge E. of Iliamna Point
Lutkea pectinata (Burch) Kuntze

July 19 *Fomes ignarius* (L.) Fries
 Fungus from Birch tree (*Betula*
 Alaska, Sargent) - Nogaheling Trail
 The dry mature but perfectly sound
 fungus is gathered by the natives of this
 region - Kaniishaks, Kenais and
 Nogahelings - placed on a flat stone
 or piece of old tin in a bright fire
 and slowly burnt until it assumes
 almost a white heat. It is then
 carefully removed from the fire and
 on cooling falls into a fine gray ash
 of the most pungent and acrid taste.
 This ash is collected and carried in
 a babiche pouch for future use, and
 the quid of tobacco after being moist-
 ened is rolled in it before being placed
 in the mouth.

On being removed from the mouth
 the quid is placed in a quid-box

(Tabaw-thulke) made of ^{white} spruce,
 Cariboo-bone or walrus-ivory, in
 which there is a small quantity
 of this ash and is there kept till
 again required — W.W.G.

90.

91.

94.

95.

096.

253 $5\frac{3}{8} \times 8\frac{1}{8}$.

